

FORECAST OF UPCOMING ANNIVERSARIES--SEPTEMBER 2014

85 Years Ago - 1929

September 24: Premier of movie "Frau im Mond" (The Girl in the Moon), directed by Fritz Lang. Hermann Oberth served as technical advisor to this German classic.

65 Years Ago – 1949

September 25: TASS the Soviet News Agency, announced the first USSR atomic explosion, Moscow.

55 Years Ago - 1959

September 9: Big Joe 1 launched, boiler-plate Mercury capsule test, 3:19 a.m., EDT, Cape Canaveral, Fla.

September 12: Luna 2 launched by Vostok rocket, 1102 UTC, Baikonur, USSR -- First probe to strike the Moon. It carried the first flags to be placed on the Moon: a pennant with the symbol of the USSR and the banner "September 1959".

September 17: First powered X-15 flight, A. Scott Crossfield at the controls, Edwards, CA.

September 18: Vanguard 3 successfully launched by Vanguard rocket, 1:20 a.m., Cape Canaveral, Fla.

50 Years Ago - 1964

September 4: OGO 1 launched by Atlas Agena, 9:23 p.m., EDT, Cape Canaveral, Fla. First Orbiting Geophysical Observatory, designed to conduct numerous space experiments simultaneously.

September 18: SA-7 (Apollo Boiler Plate 15) launched by Saturn 1, 12:22 p.m., EDT, Cape Canaveral, Fla. First demonstration of Launch Escape System (LES) design.

September 24: First launch of Minuteman II, ICBM, Cape Canaveral, Fla.

45 Years Ago - 1969

September 17: First public display of a lunar rock was unveiled at the Smithsonian Institution -- from the Apollo 11 mission.

40 Years Ago – 1974

September 1: Pioneer 11 - Three times closer pass to Jupiter than Pioneer 10, then on to Saturn.

September 21: Mariner 10, 2nd Mercury Flyby.

35 Years Ago - 1979

September 1: Pioneer 11 passed rings of Saturn, 13,000 miles above cloud tops. First spacecraft to fly by Saturn.

September 20: HEAO 3 launched by Atlas Centaur, 1:28 a.m., EDT, Cape Canaveral, Fla.

30 Years Ago – 1984

September 8: NavStar 10 launched by Atlas E, Vandenberg AFB.

September 21: Galaxy 3 launched by Delta, 6:18 p.m., EDT, Cape Canaveral, Fla.

25 Years Ago – 1989

September 5: Soyuz TM-8 launched by Soyuz rocket from Baikonur at 21:38:03 UTC. Ferry flight to Mir space station. Crew: Alexander S. Viktorenko and Aleksandr A. Serebrov.

September 25: FleetSatCom F-8 launched by Atlas Centaur, 4:41 a.m., EDT, Cape Canaveral, Fla. NASA's final Atlas/Centaur launch from Cape Canaveral Air Force Station.

20 Years Ago – 1994

During September: NASA and Boeing announced agreement on the key elements of the prime contract for the International Space Station.

September 9: STS-64 (Space Shuttle *Discovery*) launched, 6:33 p.m., EDT, KSC. Crew: Richard N. Richards, L. Blaine Hammond, Jr., Jerry M. Linenger, Susan J. Helms, Carl J. Meade, and Mark C. Lee. First flight of the LIDAR In-Space Technology Experiment (LITE). Also carried Shuttle Pointed Autonomous Research Tool for Astronomy (SPARTAN-201). First untethered U.S. space walk in 10 years (M. Lee & C. Meade).

Landed at Edwards Air Force Base, CA, September 20, 5:12 p.m., EDT. Mission Duration: 10 days, 22 hours, 49 minutes.

September 13: Spartan 1 (also known as Spartan 201) was released from STS-64 and was captured back after a few days. It carried optical instruments to measure the speed and acceleration of the solar wind in the corona.

September 30: STS-68 (Space Shuttle *Endeavour*) launched, 7:16 a.m. EDT, KSC. Crew: Michael A. Baker, Terrence W. Wilcutt, Thomas D. Jones, Steven L. Smith, Daniel W. Bursch, and Peter J. K. Wisoff. Carried the Space Radar Laboratory (SRL-2) containing SIR-C. Landed at Edwards Air Force Base, CA, October 11, 1994 1:02 p.m. EDT. Mission Duration: 11 days, 5 hours, 46 minutes.

15 Years Ago – 1999

September 23: Mars Climate Orbiter lost due to a navigation error after the orbiter fired its main engine to go into orbit around Mars.

September 24: Ikonos 2 Launched by an Athena 2 rocket at 18:22 UTC from Vandenberg AFB. First of a new generation of non-military Earth-imaging satellites to provide high- resolution images with detail at the 1m (3.3 ft) level for commercial use.

10 Years Ago – 2004

September 8: The Genesis sample return capsule with solar wind samples was released from the main spacecraft at about 12:00 UTC and re-entered the Earth's atmosphere at 11:53 a.m. EDT. It should have deployed a drogue parachute but it failed and the capsule crashed in the desert at a speed of 311 km/hr, severely damaging the capsule. The sample collection fragments, though damaged and contaminated by exposure on impact, were recovered for analysis.

5 Years Ago – 2009

September 10: Ares 1DM-1 test – The successful test firing of the five-segment Ares 1 solid rocket motor. Development Motor-1 (DM-1)

September 30: Soyuz-TMA 16 launched by a Soyuz FG rocket at 07:14 UT from Baikonur cosmodrome Crew: a Russian cosmonaut (Maksim Suraev), a NASA astronaut (Jeffrey Williams) and a Canadian space tourist (Guy Laliberté) to the International Space Station (ISS) replacing two of the crew members of the ISS.